

DATE:	24 April 2024
TO:	Oncologists, Province Wide
FROM:	Edmonton Zone Immunohistochemistry Laboratory, Alberta Precision Laboratories (APL)
RE:	PD-L1 Testing in Stages II/IIIA Non-Small Cell Lung Carcinoma (NSCLC)

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- PD-L1 biomarker immunohistochemistry (IHC) testing to determine patient eligibility of Atezolizumab in resected Stages II to IIIA Non-Small Cell Lung Carcinoma (NSCLC) is now available in the Edmonton Zone IHC Lab.
- Samples:

Samples Accepted	Samples Not Accepted
Samples must be formalin fixed for 6-72 hours. <ul style="list-style-type: none"> • Surgical specimens 	<ul style="list-style-type: none"> • Specimens fixed in any fixatives other than formalin (including alcohol based) • Material for cytology cell blocks (these were not included in the analytical method comparison or clinical outcome studies) • Decalcified bone specimens

- Requests for testing by Oncologist only

Background

- Impower010 clinical trial demonstrated significantly improved disease-free survival with adjuvant Atezolizumab on Stages II to IIIA NSCLC that are negative for EGFR and ALK mutations. The companion diagnostic test, PD-L1 NSCLC (SP263), is now being offered in Alberta.
- Testing will be performed in the Edmonton Zone IHC Lab with interpretation being performed in both Edmonton and Calgary.
- PD-L1 biomarker immunohistochemistry (IHC) testing to determine patient eligibility for Pembrolizumab in advanced non-small cell lung carcinoma (NSCLC) has been available for ordering within Alberta since December 12, 2016, and will continue to be available.

Action Required

Disease	Testing Performed	How to request
Stages II/IIIA NSCLC- Squamous	PD-L1 biomarker testing performed	In Epic: Use "Request for Additional Testing for Pathology Samples" Select:



		<p>Requested Tests <input type="text" value="PD-L1"/></p> <p>PD-L1 Testing</p> <ul style="list-style-type: none"> Breast Triple Negative - Pembrolizumab - 22C3 Head and Neck Squamous Cell Carcinoma - Pembrolizumab - 22C3 Lung NSCLC - Pembrolizumab - 22C3 - Advanced Stage Lung NSCLS - Atezolizumab - SP263 - Early Stage Upper GI - Nivolumab - 28-8 Uterine Cervix - SCC and Adenocarcinoma - Pembrolizumab - 22C3 Other (specify in comment box to the right) <p>Requisition: Forward to Edmonton Zone IHC Lab. Fax: 780-429-2819</p>
<p>Stages II/IIIA NSCLC- Non-squamous (Adenocarcinoma)</p>	<p>EGFR/ALK-5A4/PD-L1 biomarker testing algorithm is performed</p>	<p>In Epic: Use "Request for Additional Testing for Pathology Samples" Select:</p> <p>Requested Tests <input type="text" value="Lung Carcinoma Mutation Analysis (MP-C,E)"/></p> <p>Staging: <input type="text" value="Lung NSCLC-Pembrolizumab -22C3 (Stages IIIB/IV)"/> Lung NSCLC- Atezolizumab - SP263 (Adjuvant therapy Stages II/IIIA)</p> <p>Requisition: Forward to Edmonton Molecular Pathology Lab: Fax:780-407-8599 Forward to: Calgary Consult Desk: Fax 403-944-4748</p>

Effective April 25, 2024

Questions/Concerns

Edmonton:

- **IHC:** Dr. Gilbert Bigras- Director IHC Laboratory, Gilbert.Bigras@albertaprecisionlabs.ca 780-432-8445
- **Molecular:** Dr. Cheryl Mather Cheryl.Mather@albertaprecisionlabs.ca 780-407-2717

Calgary:

- **IHC:** Paul Klonowski – Associate Medical Director; Director IHC Laboratory, Calgary 403-770-3430
- Dr. Martin Hycza Martin.Hycza@albertaprecisionlabs.ca 403-944-4759
- **Molecular:** Dr. Adrian Box Adrian.Box@albertahealthservices.ca

Approved by

- Dr. Carolyn O'Hara, Interim Chief Medical Laboratory Officer, Alberta Precision Laboratories

Effective September 1, 2023, APL has become the sole provider of all public lab services in Alberta. As a result, community lab services formally provided by DynaLIFE Medical Labs will become the responsibility of Alberta Precision Labs (APL). This change impacts all zones.